

WHAT IS CLAIMED IS:

1. A physiological characteristic monitor, comprising:  
a sensor input capable of receiving a signal from a sensor, the signal being based on a sensed physiological characteristic value of a user; and  
a processor for operating an alarm based on user input from an input device;  
wherein the alarm indicates an alarm condition when the sensed physiological characteristic value exceeds a set range.
2. The physiological characteristic monitor of claim 1, wherein operating the alarm comprises setting parameters of the alarm based on the user input from the input device.
3. The physiological characteristic monitor of claim 2, wherein the physiological characteristic value is a measurement of the concentration of blood glucose in the user and the alarm indicates a glycemic condition.
4. The physiological characteristic monitor of claim 3, wherein the display shows the measurement of the concentration of blood glucose indicating the glycemic condition until the alarm is acknowledged by the user.
5. The physiological characteristic monitor of claim 4, wherein the display shows a time of the alarm.
6. The physiological characteristic monitor of claim 3, wherein the glycemic condition comprises a hypoglycemic condition and the parameters of the alarm set based on the user input include a specified hypoglycemic blood glucose level, and further wherein the alarm indicates the hypoglycemic condition when the measurement of the concentration of blood glucose in the user is less than or equal to the specified hypoglycemic blood glucose level.
7. The physiological characteristic monitor of claim 6, wherein the display shows a low indicator to indicate the hypoglycemic condition.

8. The physiological characteristic monitor of claim 3, wherein the glycemic condition comprises a hyperglycemic condition and the parameters of the alarm set based on the user input include a specified hyperglycemic blood glucose level, and further wherein the alarm indicates the hyperglycemic condition when the measurement of the concentration of blood glucose in the user is greater than or equal to the specified hyperglycemic blood glucose level.

9. The physiological characteristic monitor of claim 8, wherein the display shows a high indicator to indicate the hyperglycemic condition.

10. The physiological characteristic monitor of claim 3, wherein the alarm indicates the glycemic condition only if the monitor is calibrated.

11. The physiological characteristic monitor of claim 3, wherein the glycemic condition comprises a hypoglycemic condition, and the alarm is indicated by at least two audible descending tones.

12. The physiological characteristic monitor of claim 3, wherein the glycemic condition comprises a hyperglycemic condition, and the alarm is indicated by at least two audible ascending tones.

13. The physiological characteristic monitor of claim 3, wherein subsequent alarms are inhibited for an alarm repeat delay period after the measurement of the concentration of blood glucose indicates the glycemic condition.

14. The physiological characteristic monitor of claim 13, wherein the alarm repeat delay period is approximately 20 minutes for the glycemic condition comprising a hypoglycemic condition.

15. The physiological characteristic monitor of claim 13, wherein the alarm repeat delay period is approximately 1 hour for the glycemic condition comprising a hyperglycemic condition.

16. The physiological characteristic monitor of claim 3, wherein an alarm repeat delay period for delaying a repeated check of the alarm condition is set by the user input.

17. The physiological characteristic monitor of claim 16, wherein the alarm repeat delay period is different based upon an alarm threshold triggering the alarm, and wherein multiple alarm thresholds are used to indicate different severities of the glycemic condition.

18. The physiological characteristic monitor of claim 16, wherein the alarm repeat delay period is set by the user scrolling through a list of delay increments and selecting the desired alarm repeat delay period from the list of delay increments.

19. The physiological characteristic monitor of claim 16, wherein the alarm repeat delay period is set by the user utilizing up arrow and down arrow buttons.

20. The physiological characteristic monitor of claim 16, wherein the alarm repeat delay period is set separately for the glycemic condition comprising a hypoglycemic condition and a hyperglycemic condition.

21. The physiological characteristic monitor of claim 20, wherein the alarm repeat delay period has a default value of approximately 20 minutes for the glycemic condition comprising the hypoglycemic condition.

22. The physiological characteristic monitor of claim 20, wherein the alarm repeat delay period has a default value of approximately 1 hour for the glycemic condition comprising the hyperglycemic condition.

23. The physiological characteristic monitor of claim 3, wherein an alarm snooze period for temporarily disabling the alarm is set by the user input.

24. The physiological characteristic monitor of claim 23, wherein the alarm snooze period is different based upon an alarm threshold triggering the alarm, and wherein multiple alarm thresholds are used to indicate different severities of the glycemic condition.

25. The physiological characteristic monitor of claim 23, wherein the alarm snooze period is only available for a glycemic condition comprising a hyperglycemic condition.

26. The physiological characteristic monitor of claim 23, wherein the alarm snooze period is deactivated upon adjusting a hyperglycemic alarm setting.
27. The physiological characteristic monitor of claim 23, wherein the display shows a snooze indicator when the snooze period is running and the monitor is calibrated.
28. The physiological characteristic monitor of claim 23, wherein the display shows time remaining of the alarm snooze period.
29. The physiological characteristic monitor of claim 23, wherein the alarm snooze period is set by the user scrolling through a list of snooze period increments and selecting the desired alarm snooze period from the list of snooze period increments.
30. The physiological characteristic monitor of claim 23, wherein the alarm snooze period is set by the user utilizing up arrow and down arrow buttons.
31. The physiological characteristic monitor of claim 1, wherein operating the alarm comprises reviewing a historical list of alarms based on the user input from the input device.
32. The physiological characteristic monitor of claim 31, wherein the physiological characteristic value is a measurement of the concentration of blood glucose in the user and the alarm indicates a glycemic condition.
33. The physiological characteristic monitor of claim 32, wherein the display shows the measurements of the concentration of blood glucose in the user only within a specified range of the monitor.
34. The physiological characteristic monitor of claim 33, wherein the specified range is from 40 to 400 mg/dl.
35. The physiological characteristic monitor of claim 33, wherein the display shows a high indicator for the measurements above the specified range.

36. The physiological characteristic monitor of claim 33, wherein the display shows a low indicator for the measurements below the specified range.

37. A physiological characteristic monitor, comprising:  
a sensor input capable of receiving a signal from a sensor, the signal being based on a sensed physiological characteristic value of a user;  
a processor for determining a status of the monitor for receiving the signal from the sensor; and  
a display for showing an observable indicator of the status of the monitor;  
wherein the status is based upon at least one condition of the group comprising a sensor activity condition, a sensor calibration condition and a telemetry condition.

38. The physiological characteristic monitor of claim 37, wherein the physiological characteristic value is a measurement of the concentration of blood glucose in the user.

39. The physiological characteristic monitor of claim 37, wherein the observable indicator comprises a calibration pending indicator after the sensor telemetry condition indicates telemetry synchronization and the sensor calibration condition indicates pending calibration.

40. The physiological characteristic monitor of claim 37, wherein the observable indicator comprises a sensor replacement prompt after the sensor activity condition indicates a dead sensor.

41. The physiological characteristic monitor of claim 40, wherein the display shows a current time.

42. The physiological characteristic monitor of claim 37, wherein the observable indicator comprises a no synchronization indicator after the sensor telemetry condition indicates no telemetry synchronization.

43. The physiological characteristic monitor of claim 42, wherein the observable indicator comprises a no synchronization indicator after the sensor activity condition indicates an active sensor.

44. The physiological characteristic monitor of claim 37, wherein the observable indicator comprises an enter characteristic measurement prompt after the sensor telemetry condition indicates telemetry synchronization, the sensor calibration condition indicates no pending calibration and the sensor calibration condition indicates an invalid calibration.

45. The physiological characteristic monitor of claim 44, wherein the display shows a current time.

46. The physiological characteristic monitor of claim 37, wherein the observable indicator comprises a characteristic measurement due prompt after the sensor telemetry condition indicates telemetry synchronization, the sensor calibration condition indicates no pending calibration, the sensor calibration condition indicates a valid calibration and the processor determines that a sensor expiration time will occur after a next calibration due time.

47. The physiological characteristic monitor of claim 46, wherein the display shows the next calibration due time.

48. The physiological characteristic monitor of claim 37, wherein the observable indicator comprises a sensor replacement prompt after the sensor telemetry condition indicates telemetry synchronization, the sensor calibration condition indicates no pending calibration, the sensor calibration condition indicates a valid calibration, and the processor determines that a sensor expiration time will occur before a next calibration due time.

49. The physiological characteristic monitor of claim 48, wherein the display shows the sensor expiration time.

50. The physiological characteristic monitor of claim 37, wherein the display shows a value and time of a most recent valid reference measurement of the physiological characteristic value after the sensor calibration condition indicates no pending calibration and a valid calibration.

51. The physiological characteristic monitor of claim 50, wherein the time of the most recent valid measurement of the sensed physiological characteristic value is unaffected by a change in a system time setting of the monitor.